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ABSTRACT

This paper tests four models of the effect of the size of a subgroup of an organization on the proportion of attraction choices made by members of the subgroup that are given to other members of the subgroup. The data base consists of friendship and respect choices made by members of the Maryland State Police force. The four models are: simple linear, linear logarithmic, threshold, and logarithmic threshold. In addition, the effects of the bureaucratic functions of the subgroup on in-group choosing are tested. Though all of these models yield significantly good fits to the data used, the logarithmic threshold model provides the best fit. This model describes the process of in-group choosing (friendship and respect) as a positive linear function of the logarithm of the size of the group, provided the group is below a critical size, somewhere around 50 to 70 members. Above the critical size, there are no consistent changes in in-group choosing with increasing size. (Author)

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Size of Group and In-group Attraction: Four Models

by

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SIZE OF GROUP AND IN-GROUP ATTRACTION:

FOUR MODELS

Most recent research on interpersonal attraction has focused on the characteristics of two individuals that affect the probability that the two will be positively attracted to each other. Most notable, of course, is the current controversy over the conditions under which attitude similarity has strong effects on attraction and the theoretical explanation for such effects (e.g., Byrne, 1971a; Byrne, 1971b; Griffitt and Veitch, 1974; Levinger, 1972; Touhey, 1974; Wright, 1971). Most of this research has been experimental and any groups studied have been formed by the researcher. The fact that interpersonal relations and the development of attraction between persons usually takes place within the context of a group with its concomitant physical and social structures has been largely ignored. There has been scant attention paid even to variables long-recognized in the field of small groups or group dynamics as having consequences for interpersonal relationships (e.g. the functions of the group, status structures, relative positions of individuals in the physical and social structures, etc.).

While it is of course more difficult to control variables in field situations, investigations of such situations must be undertaken (1) to test the applicability of laboratory findings to real social situations and (2) to feed back into laboratory research by providing hypotheses regarding relevant variables that need to be held constant or systematically varied in experimental research. Indeed, much of the attitude-attraction debate centers around laboratory-field differences. The

present paper is an examination of one aspect of the attraction patterns in a naturally occurring group, where the patterns are conceived as a group variable, rather than an individual or pair level variable.

Whether considering separate groups or subgroups of a larger organization, researchers have recognized that the existence in a group of positive interpersonal relations is related to the hold the group has over its members. This relationship works in both directions: the satisfying relations within the group serve to motivate the members to remain in the group and pressures to remain in the group motivate the members to work towards achieving harmonious relations within the group. Among the variables which have been found to influence the nature of interpersonal relations in a group in a variety of ways is the size of the group (e.g., Bales and Borgatta, 1955; Cartwright and Zander, 1968, pp. 102-103; Thomas and Fink, 1963).

The present paper is concerned with the situation where a large organization is composed of subgroups of varying size. The dependent variable is the likelihood that high attraction choices (friendship and respect choices) within the organization are given to subgroup members. A relatively small group provides a greater opportunity for members to get to know each other intimately, but it provides relatively few potential friends, and relatively few total personal stimuli reach its members. This is especially true in the setting of a formal organization where truly intimate contacts are likely to be normatively discouraged. Increasing the size of a group increases the total number of interactions for each individual member and provides more potential friends from among

whom each member can choose those with whom he is most "compatible."

As with other effects of group size, the effect on attraction choices is not expected to be perfectly linear. The effects of increasing the size of a group often decrease with the initial size of the group. For example, the difference in the number of stimuli from interaction that are available to members of two groups of sizes 4 and 6 is the same as the difference in the number of stimuli provided by groups of sizes 54 and 56. However, the subjective differences are not the same in the two comparisons. The number of stimuli that members can perceive and absorb does not increase linearly with the size of the group.

Some researchers have noted that the effects of subgroup size on the behavior of members is more closely a linear function of the logarithm of the size of the subgroup, rather than a linear function of size per se (e.g., Tannenbaum, 1962; Coleman, 1964: 267-283). Coleman uses data on friendships among printers, where the shop is the subgroup, to test two mathematical models of the relationship. His discussion is based upon a two-directional process model, where the data are considered to represent the equilibrium state of the system.

The simple linear model tested by Coleman assumes that the change in the transition rate (movement towards in-group friendship choices) per added group member is constant. The logarithmic model is based on the assumption that the change in the transition rate per added group member is proportional to the reciprocal of group size. Both models support the hypothesis that increasing the size of a group increases the likelihood that group members will form friendships within the group. The simple

linear model assumes that the increase in this likelihood with one added group member is the same regardless of how large the group was before this addition. The logarithmic model assumes that the larger the group is to begin with, the smaller the increase in the rate of ingroup friendships as a result of an added group member.

The present paper has several purposes. Using another set of data, similar in many respects to Coleman's, a comparison similar to the one made by Coleman is replicated; that is, the logarithmic model is compared with the simple linear model. In addition, two more models are proposed and tested: the threshold model, which is a modification of the linear model, and the logarithmic threshold model, which is a combination of the latter model with the logarithmic model. The implications for the underlying dynamics of the development of attraction relationships with groups are discussed.

The threshold model treats the process that we are describing as a threshold effect, where the relationship is a positive linear one up to some point and then levels off. The hypothesis would be that there is some optimum size of group for within-group friendship choices, in the sense that below this size the group may not provide enough potential friends and above this size additonal group members do not add substantially to the number of potential friends. Thus, up to some size or range of sizes, we expect a positive linear relationship between the size of the subgroup and the proportion of intra-group attraction choices. Beyond this size, we expect that increasing the size of the subgroup will not consistently increase the proportion of intra-group choices.

Although Coleman verbally describes such a threshold effect (1964: 279), he does not actually test it. Mathematically, this hypothesis would amount to assuming that the increase in the transition rate per added group member is constant up to the size threshold and then becomes zero for cases beyond the threshold.

It is, of course, difficult to specify one exact size that serves as a precise borderline. Two thresholds are used here to test such a model: 50 and 70. The choice of these particular sizes as thresholds is rather arbitrary. Three rationales may be offered for such sizes. First, a preliminary inspection of the data being used here suggested that there might be cut-off points at groups of sizes 50 and 70. Second, Coleman's data appear to be consistent with such thresholds. Third, while there is by no means consensus on this point, 50 members seems to be the maximum size for a group to be considered "small" and therefore within the realm of the field of small groups. However, a group somewhat larger may still allow its members the opportunity to get to know one another; thus, size 70 is also included as a threshhold. These threshold models are compared with both the simple linear model and the linear logarithmic model.

The fourth and last model, the logarithmic threshold model, combines the notion of a threshold with the logarithmic relationship. The hypothesis regarding interaction in groups is that there are increases in potentially friendship-producing contacts with increases in size of the group, that this increase is inversely proportional to the size of the group before the addition, and that beyond a critical size there is no increase at all.

DESCRIPTION OF THE DATA BASE

The research population is the Maryland State Police force. A twenty-nine page questionnaire was mailed to all 807 members of the force in 1966, as part of a study of police careers and professionalism in the force conducted by Thomas Smith (Smith, 1968). A cover letter from the Superintendent of the force was included with the questionnaire. That letter instructed the respondents to sign at the bottom that they had completed the questionnaire and to send that form back to the Superintendent. The questionnaire itself did not include the respondent's name and was to be send in an envelope which was provided to the Center for Social Organization Studies of the University of Chicago.

Completed questionnaires were returned by 703 of the men. Thus, 87.1% of the men answered the questionnaire. The men were asked to name their "theee closest friends on the force"; 61.3% of the respondents named at least one friend. In addition, each man was asked to name the three people on the force whom he most respects; 70.3% of respondents made at least one respect choice.

As in all large formal organizations, the Maryland State Police has several levels of subgroup division. The major division of the force breaks it down into Headquarters, five Troops, and three miscellaneous units with varied functions. The personnel at Headquarters can be furether categorized by their respective Divisions and then Sections within Divisions. Troop members can be classified by the Barrack whose jurisdiction they are within and then by the specific work unit to which

they are assigned (Barrack, Post, or Detachment). Data analysis has been carried out using three different categorizations of subgroups, as shown in Table 1. The first, to which I will refer as the "large" categoriza-

Table 4 About Here

tion, consists of 9 subgroups: Headquarters, the 5 Troops, and the 3 miscellaneous units. The second categorization, referred to as "medium," consists of 20 subgroups: 6 Divisions, 11 Barracks, and the 3 miscellaneous units. The final categorization, not surprisingly called "small," includes 43 subgroups: 6 Divisions, 34 Barracks, Posts, and Detachments, and the 3 miscellaneous units. It is clear that there is some overlap: the 6 Divisions are in the medium and small categorizations and the 3 miscellaneous units are in all 3 categorizations.

The present data have several drawbacks to their utility for testing the relevant models. First, even within the small categorization, there are only 43 cases. Second, there is some relationship between the size of the subgroup and the function it serves within the organization. This is true primarily in the large categorization. Analyses will be performed to test for effects of group function. Third, within any one categorization, only a limited range of sizes of subgroups is represented. Thus, subgroups in the large categorization range between 8 and 155 members; medium subgroups range from 8 to 102 members; and small subgroups range from 8 to 47 members. In the world of ideal data, the best test of models of the type considered here would involve a large number of subgroups with the same functions and with every size represented by several cases.

There are also several differences between Coleman's data and the present data. These differences are potential sources of differential results, should they occur. On the other hand, if similar results are found despite these differences, then we can be more certain that the models adequately describe the process involved. First, Coleman grouped his data into six data points, rather than analyzing each subgroup as a value. Thus, although Coleman had data on 434 shops within the union, his scattergrams contain only 6 points. The analysis in the present paper treats each subgroup of the organization as a data point.

Second, Coleman's dependent variable is the proportion of subgroup members whose best printer friend is within the same shop. The analysis presented here defines the dependent variable as the proportion of choices made by men in the unit that are given to others in the unit. There are really two differences here. First, all friendship choices are included (up to a maximum of 3 for each individual member). Second, the proportion of within-group choosing is based on the total number of choices rather than individuals. Coleman's dependent variable is calculated by dividing the number of subgroup members whose best friend is in the subgroup by the total number of subgroup members. The variable being used here is calculated by dividing the number of choices made by subgroup members where the person chosen is in the subgroup by the total number of choices made by subgroup members.

The third, and last, major difference between Coleman's data and the present data is that the union Coleman studied was larger than was the Maryland State Police at the time it was studied. This difference is

important with regard to one assumption of the model: that "the 'pool' of printers outside the shop is the same for a member of a large shop as for a member of a small one" (Coleman, 1964: 278). Though the present data violate this assumption more than do the union data, they are still within the limits of acceptability. Thus, it is being assumed that, in an organization of 807 members, the pool of potential friends outside of a man's subgroup is the same whether the subgroup has 8 or 155 members.

COMPARISON BETWEEN THE SIMPLE LINEAR MODEL AND THE LINEAR LOGARITHMIC MODEL

In addition to the differences between the present data and Coleman's, there are some differences in the models being tested. Coleman's equation for the linear system at equilibrium is $\frac{1}{p_2} = 1 + ax$ where x is the number of persons in the shop and p_2 is the proportion of shop members whose best printer friend is outside the shop (Coleman, 1964: 279). Similarly, the equilibrium equation for Coleman's logarithmic model is $\frac{1}{p_2} = a \ln x + b$ (1964: 282). In contrast, I am using a linear model of $p_1 = a \ln x + b$, where p_1 is the proportion of subgroup choices that are within the subgroup. Of course, $1/p_2$ is completely determined by p_1, although the relationship is not perfectly linear.

In order to compare the simple linear model to the linear logarithmic model, two bivariate regressions were performed for each of the three subgroup categorizations. The dependent variable for each of these regressions was the proportion of attraction (friendship or respect) choices made by members of the subgroup that were given to others in the

subgroup. For the simple linear model, the independent variable was the size of the subgroup. For the linear logarithmic model, the independent variable was the natural log of the size of the subgroup.

In addition to the regressions for each of the three sugroup categorizations, for both friendship and respect, the same analyses were performed using all of the subgroup categorizations combined. This was done in order to increase the number of subgroups included in the analysis and to increase the representation of the various sizes within one analysis. It must of course be recognized that some of the cases are now "within" others, violating assumptions of independence of cases. The major effect of this should be to inflate the predictive power attributable to the independent variable. Thus, with this combined data set, conclusions should not be made about the proportion of the variance explained. However, since this inflation exists regardless of whether the independent variable is actual size or the logarithm of size, these regressions can still enable us to compare the two models.

Table 2 presents the simple r^2 that results from each of the analyses of friendship choices, along with the results of t-tests of the significance of the differences between the correlations for the two models. Table 3 presents the results for respect choices. (These two tables also include the results for analyses to be discussed later.)

Table 2 About Here

Table 3 About Here

As predicted, the linear model does have some fit to reality, as

evidenced by the magnitude of the proportion of the variance in in-group choices (simple r^2) that is explained by the size of the group. The linear model yields a better fit to the data on friendship choices than respect choices for all categorizations except the "small" one. This latter anomaly may result from a combination of two factors. First, respect choices in the force are heavily affected by police rank: choices flow up the rank hierarchy (Segal, 1973). Second, the larger these units are, the higher the police rank of their highest ranking member (Goodman's gamma = .476). Thus, the rank distribution of the units in the small categorization may be affecting the proportion of in-group respect choices.

Also, as expected, the logarithmic model provides a significantly better fit to the data than the simple linear model. As shown in Tables 2 and 3, the simple r^2 is higher for the logarithmic model in each of the 8 comparisons (for each subgroup categorization, for both friendship and respect choices). Only for the small subgroup categorization are the differences not significant.

COMPARISON TO A THRESHOLD MODEL

Similar regressions and tests of correlation differences were performed to compare the threshold model to each of the first two models. The independent variable for the threshold model was the size of the group, with all sizes beyond the threshold recoded to the value of the threshold. As shown in Tables 2 and 3, the threshold model describes the data consistently better than the simple linear model. This holds for

both thresholds, for all subgroup categorizations, and for both friendship and respect. Setting the threshold at size 50 yields four correlations that are higher than for size 70 and two that are the same. Thus, the threshold model is supported more than the linear model, especially with a threshold of 50.

However, inspection of Tables 2 and 3 shows that the threshold model does not fit the data as well as the logarithmic model. For friendship choices, the two models yield quite similar correlations, with the threshold model being superior only within the large subgroup categorization, which has a sample size of only 9. For the rest of the categories, the logarithmic model provides the same or a better fit to the data. Only one difference is significant: the logarithmic model fits the data significantly better than the threshold of 70 model for the combined categorization.

For respect choices, the differences are in the same directions as for friendship choices and generally larger. Again, only one of the correlation differences (and the same one as for friendship) is significant. Thus, though most of the differences are not significant, the linear logarithmic model seems to be a better choice than the threshold model for predicting in-group choices, both friendship and respect.

COMPARISON BETWEEN THE LOGARITHMIC MODEL AND THE LOGARITHMIC THRESHOLD MODEL

Tables 2 and 3 also show the results of the comparison between the simple linear logarithmic model and the logarithmic threshold model. In

all but one of the comparisons, the logarithmic threshold model predicts proportion of in-group attraction choices better than does the simple logarithmic model. The one exception to this is the case of friendship choices in the large subgroup categorization. However, none of the differences is significant. On the basis of these results, the conclusion is that the logarithmic threshold model is the best one tested in this paper, though not significantly better than the simple logarithmic model. The friendship choices conform better to the model than do the respect choices, though both distributions are rather well described by the model.

With regard to choosing between the two thresholds (50 and 70), there are three comparisons for friendship and three for respect. For friendship choices, the threshold of 70 has a higher predictive value than the threshold of 50 for 2 of the three comparisons, though the differences are quite small, and they are equivalent in the third. For respect, the threshold of 70 has one comparison on its side, 50 has one, with the differences again being small, and they are equivalent in the third. Although 70 seems to be slightly better as the critical size, only with more cases between 50 and 70 could a choice be made between the two sizes.

Table 4 presents additional results of the regression analysis for

Table 4 About Here

the logarithmic threshold model. The dependent variable is again the proportion of attraction choices within the subgroup. The independent variable is the logarithm of the size of the subgroup, with all cases

beyond the threshold recoded to the threshold. As can be seen by the F values and their significance levels, this model has considerable predictive power.

COMPARISON BETWEEN THE FOUR MODELS BASED ON SIZE OF GROUP WITH PREDICTIVE VALUE OF GROUP FUNCTION

As can be seen from Table 1, there is a relationship between the size of subgroup of the Police organization and the function of that subgroup. That is, there are differences among the subgroups as to their level in the organizational structure of the force and the duties they perform, and these differences are related to the size of the subgroup. One might, therefore, suspect that the support for the models based on the size of the subgroup is merely an artifact of the function or organizational level of the subgroup.

To test for this possibility, another regression analysis was performed, where the dependent variable was the same as before (proportion of in-group choices) and the independent variable was the function of the group. The latter variable is a nominal scale with seven values: headquarters, division, troop, barrack, post, detachment, and miscellaneous. This variable was treated as a series of dummy variables, and for each subgroup categorization, the multiple r^2 of the variables combined are presented in Tables 2 and 3. (It should be noted that each subgroup categorization has a different combination of values on this variable.)

The results show that this organizational variable has a stronger

relationship to in-group choosing than does simple size of the group for six of the eight comparisons, three for friendship and three for respect. The differences in this direction are larger for respect than they are for friendship. Thus, the function of the subgroup is a powerful predictor of the proportion of choices that are given to other members of the subgroup, especially for respect choices, as compared to the predictive power of the simple linear model. However, when compared to the logarithmic and the logarithmic threshold models, the differences are mostly small, with the larger correlation differences showing a greater predictive ability for the logarithmic models, both linear and threshold.

DISCUSSION AND CONCLUSIONS

Four models of the relationship between size of subgroup and proportion of in-group attraction choices have been tested: simple linear, linear logarithmic, threshold, and logarithmic threshold. Though all of these models yield significantly good fits to the data used, the logarithmic threshold model provides the best fit, though not significantly better than the linear logarithmic model. The logarithmic threshold model describes the process of in-group choosing (friendship and respect) as a positive lienar function of the logarithm of the size of the group, provided the group is below a critical size, somewhere around 50 to 70 members. Above the critical size, there are no consistent gains in in-group choosing with increasing size.

It must be noted that the present test involves a large, hierarchi-

cal organization, with a specialized function. This model must be tested using subgroups within other organizations of varing sizes and functions. In addition, if the principles of the effect of group size on attraction relationships supported here are truly general, then they should be supported by a data set consisting of completely distinct groups rather than subgroups of the same organization. In order to make this test, similar data would be needed on each of the groups.

In a sense, the models tested here specify the effect of propinquity on attraction under different group size conditions. Small groups presumably are less likely to provide enough friendship-producing contacts, so the members must go outside of the subgroup for their friends. Thus, they are likely to have to "travel further" in the organization for their friends. Members of larger subgroups are more likely to choose their friends from among those who are close to them in the physical and social structures of the parent group.

The dependent variable here is the proportion of choices given to other members of the subgroup. This is different from the attractiveness of the subgroup per se for the members and from the average attraction that members have towards each other. These latter two variables can serve as measures of the cohesion of the subgroup. It would be quite interesting to see how these variables are affected by the size of the group. Some previous research has shown that cohesion is negatively related to the size of the group (e.g., Cartwright and Zander, 1968: 103). There are obviously intervening variables in this relationship, such as degree of formality and communication structure.

Further tests of the models discussed in this paper and related ones need to be done with empirical data sets that are substantial enough to control for other variables besides the size of the group. The inclusion of the regression equations in this paper is intended to enable replications by other researchers.

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TABLE 1

SUBGROUPS OF THE MARYLAND STATE POLICE

"Large" Unit Categorization		"Medium" Unit Categorization		"Small" Unit Categorization	
Type of Unit	Size	Type of Unit	Size	Type of Unit	Size
Miscellaneous	8	Miscellaneous	8	Miscellaneous	8
Miscellaneous	35	Miscellaneous	35	Miscellaneous	35
Miscellaneous	39	Miscellaneous	39	Miscellaneous	39
Headquarters	83	Division	3	Division	3
		Division	3	Division	3
		Division	14	Division	14
		Division	15	Division	15
		Division	22	Division	22
		Division	26	Division	26
Troop	102	Barrack	36	Detachment	7
				Barrack	29
		Barrack	66	Post	25
				Barrack	41
Troop	105	Barrack	43	Detachment	8
				Detachment	9
				Barrack	26
		Barrack	62	Detachment	6
				Detachment	8
				Detachment	10
				Post	12
				Barrack	26
Troop	130	Barrack	28	Detachment	5
				Barrack	23
		Barrack	102	Detachment	7
				Post	23
				Post	25
				Barrack	47
Troop	150	Barrack	61	Detachment	10
				Post	21
				Barrack	30
		Barrack	89	Post	17
				Barrack	34
				Post	38
Troop	155	Barrack	31	Post	10
				Barrack	21
		Barrack	40	Detachment	9
				Detachment	9
				Barrack	22
		Barrack	84	Detachment	12
				Detachment	14
				Detachment	15
				Post	18
				Barrack	25
Number of Subgroups = 9	807	Number of Subgroups = 20	807	Number of Subgroups = 43	807

TABLE 2

COMPARISONS AMONG THE FOUR MODELS OF FRIENDSHIP CHOICE (LINEAR, LOGARITHMIC, THRESHOLD, LOG THRESHOLD): SELECTED RESULTS

Independent Variable	Simple r^2 by Subgroup Categorization: Combined (N=60)	Large (N=9)	Medium (N=20)	Small (N=43)
1. Size of Subgroup	.40	.70	.58	.39
2. Natural Log of Size	.61	.93	.78	.45
3. Size to Threshold (50)	.59	.94	.78	a
4. Size to Threshold (70)	.53	.94	.68	a
5. Ln Size to Threshold (50)	.62	.90	.79	a
6. Ln Size to Threshold (70)	.63	.95	.79	a
7. Function of Group	.50	.74	.63	.30

Values of t for Correlation Differences between Models, by Subgroup Categorization

Models Compared		Subgroup Categorization: Combined	Large	Medium	Small
Linear vs. Logarithmic	1 2	-3.8****	-3.7***	-2.3**	-1.2
Linear vs Threshold (50)	1 3	-2.8***	-2.4*	-2.5**	a
Linear vs. Threshold (70)	1 4	-2.8***	-2.7**	-2.1*	a
Logarithmic vs. Threshold (50)	2 3	.7	- .4	.0	a
Logarithmic vs. Threshold (70)	2 4	2.0**	- .2	1.4	a
Logarithmic vs. Log Threshold (50)	2 5	- .5	.4	- .2	a
Logarithmic vs. Log Threshold (70)	2 6	- .5	- .5	- .6	a

[a]Linear and Threshold are equivalent because there are no cases beyond the threshold; Logarithmic and Logarithmic Threshold are equivalent for the same reason.

* p <.10; **p <.05; ***p <.01; ****p <.001

TABLE 3

COMPARISONS AMONG THE FOUR MODELS OF RESPECT CHOICE (LINEAR, LOGARITHMIC, THRESHOLD, LOG THRESHOLD): SELECTED RESULTS

	Simple r^2 by Subgroup Categorization			
Independent Variable	Combined (N=60)	Large (N=9)	Medium (N=20)	Small (N=43)
1. Size of Subgroup	.37	.33	.24	.42
2. Natural Log of Size	.60	.56	.52	.50
3. Size to Threshold (50)	.56	.70	.38	a
4. Size to Threshold (70)	.51	.70	.30	a
5. Ln Size to Threshold (50)	.62	.66	.57	a
6. Ln Size to Threshold (70)	.62	.69	.54	a
7. Function of Group	.65	.70	.22	.49

Values of t for Correlation Differences between Models, by Subgroup Categorization

		Subgroup Categorization			
Models Compared		Combined	Large	Medium	Small
Linear vs. Logarithmic	1 2	-4.3****	-2.0*	-3.3***	-1.6
Linear vs. Threshold (50)	1 3	-2.9***	-2.0*	-1.5	a
Linear vs. Threshold (70)	1 4	-3.0***	-3.1**	-1.3	a
Logarithmic vs. Threshold (50)	2 3	1.1	-1.7	.8	a
Logarithmic vs. Threshold (70)	2 4	2.2**	-1.8	1.2	a
Logarithmic vs. Log Threshold (50)	2 5	- .8	- .7	- .2	a
Logarithmic vs. Log Threshold (70)	2 6	- .9	-1.6	- .1	a

[a]Linear and Threshold are equivalent because there are no cases beyond the threshold; Logarithmic and Logarithmic Threshold are equivalent for the same reason.

*p < .10; **p < .05; ***p < .01; ****p < .001

TABLE 4

LOGARITHMIC THRESHOLD MODEL: ADDITIONAL REGRESSION INFORMATION

Dependent Variable: Proportion of Friendship Choices Within Subgroup

Subgroup Categorization	Threshold	B	Standard Error of B	Beta	Constant	F	df	Significance of F
Combined (N=60)	50	.2269	.0232	.7895	-.2120	95.996	1,58	.001
	70	.2092	.0212	.7911	-.1689	96.999	1,58	.001
Large (N=9)	50	.3871	.0492	.9478	-.8492	61.825	1,7	.001
	70	.3364	.0302	.9730	-.7290	124.346	1,7	.001
Medium (N=20)	50	.2431	.0297	.8876	-.2930	66.846	1,18	.001
	70	.2278	.0276	.8893	-.2582	68.065	1,18	.001
Small (N=43)	none	.2046	.0354	.6703	-.1611	33.442	1,41	.001

Dependent Variable: Proportion of Respect Choices Within Subgroup

	Threshold	B	Standard Error of B	Beta	Constant	F	df	Significance of F
Combined (N=60)	50	.2108	.0217	.7868	-.3432	94.223	1,58	.001
	70	.1944	.0199	.7884	-.3032	95.279	1,58	.001
Large (N=9)	50	.3054	.0833	.8109	-.6776	13.442	1,7	.001
	70	.2655	.0667	.8329	-.5833	15.858	1,7	.001
Medium (N=20)	50	.1472	.0304	.7520	-.1064	23.424	1,18	.001
	70	.1350	.0291	.7377	-.0758	21.485	1,18	.001
Small (N=43)	none	.2006	.0313	.7071	-.3200	41.002	1,41	.001